

Abstract

[0044] A constant velocity joint has an outer part, an inner part, a plurality of balls, and a cage having windows for retaining the balls in the ball tracks of the outer and inner parts. The cage retains the balls in a plane. Corresponding pairs of outer and inner ball tracks guide the balls. Corresponding pairs of outer and inner ball tracks that are axially straight alternate with corresponding pairs of outer and inner ball tracks forming angles of intersection with respect to an axis. The outer part and the inner part operate in a normal axial range, there being at least one energy absorption surfaces located in the outer extended axial range or the inner extended axial range of either part. The energy absorption surface interferes with at least one of the balls when the joint is operated beyond the normal axial range.